

Attention

For Customers in the U.S.A.

DIGITAL STILL CAMERA PDR-2300



Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE

FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Change the direction of the radio or TV antenna.

Move the equipment or the radio or TV. For example, if the equipment is to the right of the TV, move it to the left of the TV.

Or, move the equipment farther away from the radio or TV.

- Plug the equipment into a different outlet. Don't plug your radio or TV into the same circuit as your equipment.
- Ensure that all expansion slots are covered.

Also, ensure that all metal retaining brackets are tightly attached to the equipment.

- If these suggestions don't help, consult your equipment dealer or experienced radio/TV technician for help.

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Attention (continued)

Getting Ready

Caution

If you modify the camera in any way, without getting approval from Toshiba Corporation, your camera may violate FCC regulations. Violation of FCC regulations may cause the FCC to void your right to use the modified camera.

Taking Pictures

TOSHIBA AMERICA INFORMATION SYSTEMS, INC.

Imaging Systems Division

9740 Irvine Boulevard,

Irvine, California 92618-1697

Phone Number: (800) 288-1354

Playing Back/
Erasing Images

For Customers in Canada

Caution

This Class B digital apparatus complies with Canadian ICES-003.

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Before Reading This Manual

Thank you for purchasing the Toshiba PDR-2300 Digital Still Camera.

To ensure that you use this camera safely and correctly, read this Instruction Manual carefully before using the camera. Once you have finished reading this Instruction Manual, keep it handy at all times.

The Design, Specifications, Software and Contents of Instruction manual are subject to change without prior notice for improvement.

Trademark Information

- Microsoft® and Windows® are registered trademarks in the U.S. and other countries by the U.S. Microsoft Corporation. Windows® is an abbreviated term referring to the Microsoft Windows Operating System.
- Macintosh is a trademark of Apple Computer, Inc.
- ACDSee™ is a trademark of ACD Systems Ltd.
- SD™ is a trademark.



- Other companies or product names are trademarks or registered trademarks of the respective owners.

Notes on Copyright

Images taken with digital still cameras are for personal enjoyment only and should not be used, indicated, distributed or exhibited, etc. without the permission of the copyright holder as per copyright laws.

Note that photographing some performances, exhibitions, etc., is restricted, even when photographs are taken for personal enjoyment. In addition, the transfer of memory cards (SD memory cards, etc.) containing copyrighted images and files is limited to purposes within the range permitted by copyright laws.

Software Version Update

For better use, the firmware of the camera may be upgraded after shipment. The methods of version upgrade are available in our website on page 97.

About OS Abbreviations

- Windows 98
This abbreviation stands for the Microsoft® Windows® 98 operation system.
- Windows 2000
This abbreviation stands for the Microsoft® Windows® 2000 operation system.
- Windows Me
This abbreviation stands for the Microsoft® Windows® Me operation system.
- Windows XP
This abbreviation stands for the Microsoft® Windows® XP operation system.

Safety Precautions

Read these safety precautions carefully before using the PDR-2300. These instructions contain valuable information on safe and proper use that will prevent harm and damage to the operator and other persons. Make sure that you fully understand the following details (indications) before proceeding to the main descriptions in this manual.

Indication Definitions

Indication	Meaning
 DANGER	This indicates the existence of an imminent hazard that could result in death or serious bodily injury*1, if the safety instruction is not observed.
 WARNING	This indicates the existence of a hazard that could result in death or serious bodily injury*1, if the safety instruction is not observed.
 CAUTION	This indicates the existence of a hazard that could result in bodily injury*2 or property damage*3.

*1"Serious bodily injury" means loss of eyesight, injuries, burns (high and low temperature), electric shock, fracture, and poisoning, which leaves a sequela and requires hospitalization or prolonged treatment.

*2"Bodily injury" means injuries, burns, and electric shock, which does not require hospitalization or prolonged treatment.

*3"Property damage" means extended harm to home, household effects, domesticated animals, and pets.

Graphic Symbol Definitions

Graphic Symbol	Meaning
	Indicates a prohibited action that must not be carried out. The prohibited action is indicated graphically in or near the symbol or described in text.
	Indicates a necessary action that must be carried out. The necessary action is indicated graphically in or near the symbol or described in text.

Safety Precautions (continued)

Exemption Clauses

- Toshiba Corporation bears no responsibility in the case of damages arising from earthquakes, fire not liable to Toshiba Corporation, operating by third parties, other accidents, or use under abnormal conditions including erroneous or improper operation and other problems.
- Toshiba Corporation bears no responsibility for incidental damages (lost profit suspension of business activities, corruption or loss of the memory contents, etc.) arising from the use of or the inability to use this unit.
- Toshiba Corporation accepts no liability whatsoever for any damages arising from the incorrect use not in compliance with instructions in this instruction manual.
- Toshiba Corporation accepts no liability whatsoever for any damages arising from malfunctions arising from combination with equipment or software that is not related to Toshiba Corporation.
- Toshiba Corporation accepts no liability whatsoever for any damages arising from repair or modifications made by the user or cause to be made by the user and carried out by an unauthorized third party.
- Toshiba's liability, with the exception of a deliberate act or gross negligence by Toshiba, shall not exceed the purchase price of the product in any circumstances.

When Using the Product

WARNING

Should you ever notice smoke, a strange odor or excessive heat coming from the camera, immediately turn OFF the power and remove the batteries and AC power adapter.

Continued use in this state might cause fire, electric shock or burns. For details on repair, consult the store of purchase, or please contact the technical support number.

If foreign objects or water have entered the camera, immediately turn the power OFF and remove the batteries and AC power adapter.

Continued use in this state might cause fire or electric shock. For details on repair, consult the store of purchase, or please contact the technical support number.



Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Safety Precautions (continued)

WARNING (continued)

If the camera has fallen or its case is damaged, immediately turn the power OFF and remove the batteries and AC power adapter.

Continued use in this state might cause fire or electric shock. For details on repair, consult the store of purchase, or please contact the technical support number.



Do not allow the camera having metallic objects or other flammable foreign matter inside.

This might cause fire or electric shock. Do not insert or drop foreign objects in the SD memory card slot, jacks, other holes or openings.



Do not use in areas near water.

This might cause fire or electric shock. Take special care during rain, snow, on the beach or near the shore.



Do not use the camera in the bath or shower.

This might cause fire or electric shock.



WARNING (continued)

Do not place the camera on inclined or unstable surfaces.

This might cause the camera to fall or tilt over.



Do not disassemble, change or repair the camera.

This might cause fire or electric shock. For details on repair and internal inspection, consult the store of purchase, or please contact the technical support number.



Do not touch power or TV antenna cords during a thunderstorm.

This might cause electric shock.



Do not use the camera while you are walking, driving or riding a motorcycle.

This might cause you to fall over or result in a traffic accident.



Safety Precautions (continued)

CAUTION

If you want to use the camera on an airplane, consult with the airline and follow their instructions.

Use of the camera is sometimes restricted due to potential radio interference.



Do not use the camera in humid, steamy, smoky or dusty places.

This might cause fire or electric shock.



Do not leave the camera in places where the temperature may increase significantly, such as inside a car.

This might adversely affect the case or the parts inside, resulting in fire.



Do not play the supplied CD-ROM with a music CD player or a similar device.

This might damage the headphone or speaker, and /or may damage your ears.



Do not look at the sun through the camera viewfinder.

This may cause injury of the eyes.



CAUTION (continued)

Do not drop or subject the camera to strong impact.

This might cause fire, electric shock or malfunctions.



Before moving the camera, disconnect the cables.

Not doing this might damage the cables, resulting in fire or electric shock.



Do not wrap the camera or place it in cloth or blankets.

This might cause heat to build up and deform the case, resulting in fire. Use the camera in a well-ventilated place.



Before cleaning the camera, remove the batteries and AC power adapter.

Not doing this might cause fire.



Do not use the flash near the eyes.

This might cause temporary damage to the eyesight.



Safety Precautions (continued)

CAUTION (continued)

Do not subject the LCD monitor to impact.

This might damage the glass on the screen or cause the internal fluid to leak. If the internal fluid enters your eyes or comes into contact with your body or clothes, immediately rinse them with fresh water. If the internal fluid has entered your eyes, immediately consult a physician to receive treatment.



For the internal cleaning of the camera, consult the store of purchase every two years.

If dust accumulates inside the camera, this might result in fire or malfunction. Consult the store of purchase regarding the cleaning costs.



Do not swing the camera while walking.

If you hold the strap and swing the camera, the camera might come into contact to other people or any object, resulting in injury or malfunction.



About the AC Power Adapter

WARNING

Use the AC power adapter only with the indicated power supply voltage.

Use with any other power supply voltage might cause fire or electric shock.



Do not disassemble, modify, or repair the AC power adapter.

This might cause fire or electric shock.



If dirt or dust has adhered to the plug on the AC power adapter cable or the plug joints, remove the plug from the power source and clean it.

The insulation decrease of the plug might result in fire.



Safety Precautions (continued)

WARNING (continued)

Do not place blankets over the AC power adapter connected with the power source or place the Adapter near a heater or on an electric (warm) carpet.

This might cause fire or malfunction.



Do not damage, modify (e.g., to extend), or heat the AC power adapter cable.

Do not pull the AC power adapter cable, place something heavy on it, or pinch it.



Do not bend, twist, or bundle the AC power adapter cable with an excessive force.

These might cause fire or electric shock.

CAUTION

Do not connect or disconnect the AC power adapter plug with a wet hand.

This might cause electric shock.



Do not remove the AC power adapter plug from an electrical outlet by pulling the cable.

This might damage the cable or plug, resulting in fire or electric shock. Make sure to hold the plug when removing it.



Safety Precautions (continued)

CAUTION (continued)

Use only the supplied AC power adapter and power cable.

Use of an AC power adapter and/or a power cable other than specified might cause fire or malfunction.



If you plan not to use the camera for a long period of time, remove the AC power adapter plug from an electrical outlet.

Not doing this might cause malfunction on the camera, resulting in fire.



Do not use the supplied AC power adapter with another model or device.

This might cause fire or electric shock.



Firmly insert the AC power adapter plug into an electrical outlet.

Not doing this might cause fire or electric shock.



About Batteries

DANGER

Use only the specified batteries.

Use of batteries other than specified might cause fire, or malfunctions.



Do not drive a nail into the batteries, hammer it, or step on it.

Electrode shorting (if happens) might cause the batteries to heat up, rupture, or ignite, resulting in fire or serious injury.



Do not connect the battery electrodes (plus and minus terminals) with any metal such as wire. Also do not carry or store the batteries with metal objects such as a necklace or hairpins.

Electrode shorting (if happens) might cause the batteries to rupture, ignite or heat up, resulting in fire or serious injury.



Safety Precautions (continued)

DANGER (continued)

Do not heat, disassemble or throw the batteries into fire or water.

Doing this might cause the batteries to rupture, ignite or heat up, resulting in fire or serious injury.



Dispose of the exhausted batteries properly according to your local regulations. Before disposing of, attach insulating tape to both the electrodes.

Electrode shorting (if happens) might cause the batteries to rupture or ignite, resulting in fire or serious injury.



WARNING

Keep the batteries out of the reach of children.

Swallowing a battery might result in poisoning. If a child swallows a battery, immediately consult a physician.



If battery fluid enters the eyes, immediately rinse the eyes with fresh water and consult a physician to receive treatment.

Not doing this might cause permanent damage to the eyes.



Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Safety Precautions (continued)

CAUTION

Insert the batteries with careful attention according to the polarities (+ or -) of the terminals.

Inserting the batteries with inverted polarities might cause fire and injury, or damage the surrounding areas.

When carrying or storing the batteries, place each one in a separate plastic bag. Not doing this might cause shorting through any metal objects, resulting in liquid leak, ignition, rupture, burn, or injury.

When changing batteries, replace both with new batteries. Not doing this might cause them to rupture, ignite or heat up, resulting in fire, major injury or damaging the camera.

"New batteries" refers either to recently purchased, never used Nickel or Lithium batteries, those within the expiry date of recommended use, or to Nickel Metal Hydrogen (Ni-MH) or Nickel Cadmium batteries that have recently been charged simultaneously.



CAUTION (continued)

Do not use different types of batteries together, or mix old and new batteries.

This might cause them to rupture, ignite or heat up, resulting in fire, major injury or damaging the camera.

Do not remove batteries immediately after using the camera for a long period of time. The batteries are heated up, which might result in fire injury.

Do not leave dead or exhausted batteries in the camera.

Not doing this might cause the batteries to rupture, ignite or heat up, resulting in fire, major injury or damaging the camera.



Contents

Preface

Attention	1
Before Reading This Manual	3
Safety Precautions	4
Indication Definitions	4
Graphic Symbol Definitions	4
Exemption Clauses	5
When Using the Product	5
About the AC Power Adapter	8
About Batteries	10
Contents	13
Using Your Camera Correctly	16
Handling Your Camera	16
Handling the Batteries	18
Handling the AC Power Adapter	20
Handling the SD Memory Card	22

Getting Ready

Accessories	24
Getting to Know the Camera	25
Front View	25
Rear View	26
LED Indicators	27
Mode Dial	28
Status LCD	29
LCD Monitor Indicators	30

Installing and Removing the Batteries	32
Loading the Batteries	32
Removing the Batteries	33
Battery Status	34
Using the AC Power Adapter	35
Loading and Removing the SD Memory Card	36
Loading the SD Memory Card	36
Removing the SD Memory Card	36
Turning the Power On/Off	37
Turning the Power On	37
Turning the Power Off	37
How to Hold Your Camera	38
How to Press the Shutter Button	39
Choosing the Language	41
Setting the Date and Time	42
Setting the Image Resolution and Quality	43

Taking Pictures

Taking Pictures	45
Using the Viewfinder	45
Using the LCD Monitor	46
Reviewing the Last Picture in the Record Mode	47
Using the Optical Zoom	48
Using the Digital Zoom	49
Using the Self-timer	50
Using the Macro Mode	51
Using the Flash	52

Contents (continued)

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Taking Pictures Manually	54
Changing the System Settings (Rec Mode)	55
Record Menu	55
LCD BRIGHTNESS	55
DIGITAL ZOOM	55
WHITE BALANCE (Manual mode only)	56
EV COMPENSATION (Manual mode only)	56
SHARPNESS (Manual mode only)	57
SELFTIMER	57
EXIT	57

Playing Back/Erasing Images

Playing Back Images	58
Zooming Images in and out	59
Displaying Thumbnail Images	60
Slideshow Display	61
Protecting Images	62
Protecting an Image	62
Removing the Protection	63
DPOF Settings	64
Deleting Images	66
Changing the System Settings (Playback Mode)	67
Playback Menu	67
LCD BRIGHTNESS	67
SLIDE SHOW	67
COPY TO CARD	67
PROTECT	68
DPOF	68
EXIT	68

Recording Video Clips

Recording Video Clips	69
Reviewing Video Clips	70

Connecting to the Computer

About the Software Application	71
System Requirements	72
Connecting to a Computer Running Windows	73
Installing ACDSee™	73
Installing the USB Driver	74
Connecting to the PC	75
Connecting to a Macintosh Running Mac OS 9.0 or Later	76
Installing ACDSee™	76
Connecting to the Macintosh	77
Disconnecting the Camera from the Computer	78
Using ACDSee™	79
Transferring Recorded Images to the Computer ..	79
Copying Processed Images to the Camera	81
Installing DirectX	83
For Windows Only	83
File Structure	84
About Still Image Data	84
About Movie Data	84

Contents (continued)

Other Useful Information

Changing the System Settings (Setup mode)	85
DATE/TIME	85
LANGUAGE	85
SOUND	85
FORMAT MEDIA	85
VIDEO MODE	85
VERSION INFO	86
AUTO POWER OFF	86
RESET TO DEFAULT	87
Connecting the Camera to Other Devices	88
Camera Specifications	89
Messages Displayed on the LCD Monitor	91
Troubleshooting	92
Glossary	94
Global Contacts	97
For Customers in the United States and Canada ..	98

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Using Your Camera Correctly

When you use your camera, strictly observe the Safety Precautions on page 4 and the notes below.

Handling Your Camera

● Avoid using or storing the camera in the following places:

- Places subject to humidity, dust and dirt
- Places subject to direct sunlight
- Places subject to high or low temperature
- Places filled with highly flammable gas
- Places near gasoline, benzene or paint thinner
- Places subject to strong vibrations
- Places subject to smoke or steam
- Places subject to strong magnetic fields (such as electric motors, transformers or magnets)
- Places contacting chemicals such as pesticides or next to rubber or vinyl products for a long period

● Do not expose the camera to sand or dust.

The PDR-2300 is particularly sensitive to sand and dust. If the camera comes into contact with sand or dust, not only will the camera become damaged, it will also no longer be repairable. Pay special attention when using the camera at the beach or where sand or dust is likely to be present.

● Condensation

Due to a sudden change in temperature, such as when you move the camera from a cold location to a warm one, water droplets (condensation) may form on the inside of the camera or on the lens. When this occurs, turn the camera OFF and wait an hour before using the camera. Condensation may also form on the SD Memory Card. If this happens, remove the SD Memory Card, wipe off any condensation and wait a short time before using it again.

Using Your Camera Correctly (continued)

● Carrying out maintenance on your camera

- To prevent the lens, surface of the LCD monitor or viewfinder from being scratched, blow off any dust from these parts with a blower brush and lightly wipe with a soft dry cloth.
- Clean the body of the camera with a soft dry cloth. Do not use volatile liquids such as paint thinner, benzene or insecticide, as these may react with the camera body and cause deformation or remove the coating.

Handling the Batteries

When you use the battery, strictly observe the Safety Precautions on page 4 and the notes described below.

● Recommended Batteries

To extend the use of the camera, we strongly recommend that you only use the following types of batteries:

- AA Alkaline batteries (Not Rechargeable): LR6AG (Toshiba)
- AA Nickel Metal Hydride (Ni-MH) batteries (Rechargeable): TH-3 (Toshiba)

The camera does not have a rechargeable function. Please use the battery charger on the market when recharging the Nickel Hydride (Ni-MH) battery.

- AA Lithium battery (Not Rechargeable)

● Notes on batteries other than the recommended batteries

AA Manganese batteries cannot be used in this camera.

Please be careful to purchase the proper batteries.

For consideration of the environment, we do not recommend the use of AA Nickel Cadmium batteries.

● Note on Battery Life

The battery life may vary depending on individual brand of the battery, length of storage since manufacture, temperature of the camera and batteries, and operating condition such as flash. Moreover, if the polarities of the batteries (+ or -) and the terminal of the camera that come in contact with the electrodes are contaminated, electricity will not flow properly and the camera will decide that the batteries are exhausted. When removing and loading the batteries, be careful not to touch these parts. If the parts are contaminated, clean them with a dry cloth.

When using the supplied AA Alkaline batteries, the number of photographs that can be taken are shown as below.

Conditions: 25 °C, Flash use rate 100%, LCD ON

Photography interval: 1 frame every 30 seconds

Possible number of shots: 100 shots

- The number of frames shown above is a reference value.

Handling the Batteries (continued)

● Method of Extending Battery Life

Even if the camera is turned off, the battery power is slightly consumed. We strongly recommend that you remove the batteries when the camera is not in use for an extended period of time. However, removing the batteries will return the date and time settings to the default values. If this happens, reset them.

Low temperatures can also affect the performance of the battery. We recommended that you keep the camera and batteries warm to prevent from cold by placing them in clothes.

Furthermore, the battery performance affected by low temperature, resulting in decreasing the possible shots, will restore its function when batteries return to the adequate temperature (25°C).

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Handling the AC Power Adapter

Be sure to use only the specified AC power adapter (PDR-AC20 : sold separately). Using a different AC power adapter might cause the camera to malfunction.

When you use the AC power adapter, strictly observe the Safety Precautions on page 4 and the notes described below.

- Use the AC cord with the rating of the country/region where the camera is used.
- Be sure that you do not allow the AC power adapter to contact any other metal object as this might cause a short circuit.
- To connect the AC power adapter, firmly insert the plug on the end of the cable into the DC IN jack. Do not insert the plug into other terminals. This might cause the camera to malfunction.
- Before disconnecting the connector cable, turn the camera off and then disconnect the cable by its plug. Do not disconnect the connector cable by pulling the cable.
- Do not drop the AC power adapter or subject it to strong impacts.
- Do not use the AC power adapter in very hot and humid locations.
- Do not plug in the AC power adapter while using the battery.
- The AC power adapter is for indoor use only.
- Use only the specified AC power adapter.
- The AC power adapter may sometimes become warm during use. This is normal and not a malfunction.
- Buzzing or whirring noises may come from inside the camera. This is normal and not a malfunction.
- Do not use the AC power adapter near a radio as it could interfere with radio signal reception.
- If you remove the battery or AC power adapter while the camera is in operation, the date may be lost from memory. If this happens, reset the date.

Handling the AC Power Adapter (continued)

Specifications

AC Adapter (PDR-AC20)

Input	: 100 to 240V AC, 50/60Hz
Output	: 5V DC 3A
Operating temperature	: 0°C to +40°C
Storage temperature	: -20°C to +65°C
Maximum outer Dimensions	: 40 x 30.5 x 94.2mm (W x H x D)
Weight	: Approx, 150g

IMPORTANT

- Use the power supply indicated on the supplied AC cord. When using power supply other than the displayed voltage in other countries/region, please purchase the AC cord that applies to the standard of the country/region.
- The AC power adapter can be used with 100V to 240V.

Handling the SD Memory Card

When you use the SD memory card(sold separately), strictly observe the Safety Precautions on page 4 and the notes described below.



● Cautions

The SD memory card includes a non-volatile semiconductor memory (NAND Flash EEPROM). Under normal use, data saved in the SD memory card is not damaged or lost. If used improperly, however, the data may be damaged or lost. Please be aware that Toshiba Corporation will accept no responsibility whatsoever for damaged or lost data, regardless of the type or cause of the problem or damage.

The SD memory card uses part of the memory as its system area. The actually usable memory capacity is therefore lower than the indicated capacity.

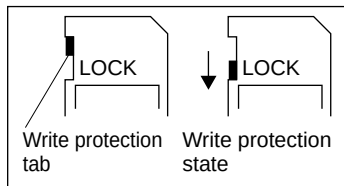
The supplied SD memory card has been already formatted for image storage. Always use this camera when reformatting the card to erase images or folders. Formatting the SD memory card on other devices (PC, etc.) may result in problems such as inability to read or write data.

We strongly recommend that you make backups of important data.

When the SD memory card comes to the end of its life, it does not allow image data to be written or deleted. If this happens, purchase a new SD memory card.

● Write Protection

To prevent valuable data from being erased accidentally, switch the write protect tab at the side of the SD memory card to "LOCK." To save, edit, or erase data in the card, cancel the write protection state.



Handling the SD Memory Card (continued)

● Specifications

- | | |
|------------------------------|--|
| • Memory type | : NAND Flash memory |
| • Operating temperature | : 0°C to +40°C |
| • Storage temperature | : -20°C to +60°C |
| • Operating/Storage humidity | : 30% to 80% (no condensation) |
| • Dimensions | : 24.0 mm x 32.0 mm x 2.1 mm (W x H x D) |
| • Weight | : Approx. 2g |

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Accessories

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Carefully unpack your package and make sure that you have the following items. In the event that any item is missing or if you find any mismatch or damage, promptly contact your dealer.

- 4 x AA alkaline batteries



- Wrist strap



- Camera case



- Video cable



- Lens cap with lens strap



- Instruction manual



- USB cable



- Software CD-ROM



Sold separately

- AC power adapter
PDR-AC20
- SD memory card
SD-M3201M(32MB)
SD-M6401M(64MB)
SD-M1280M(128MB)

Getting to Know the Camera

Front View



Getting Ready

Taking Pictures

Playing Back/
Erasing Images

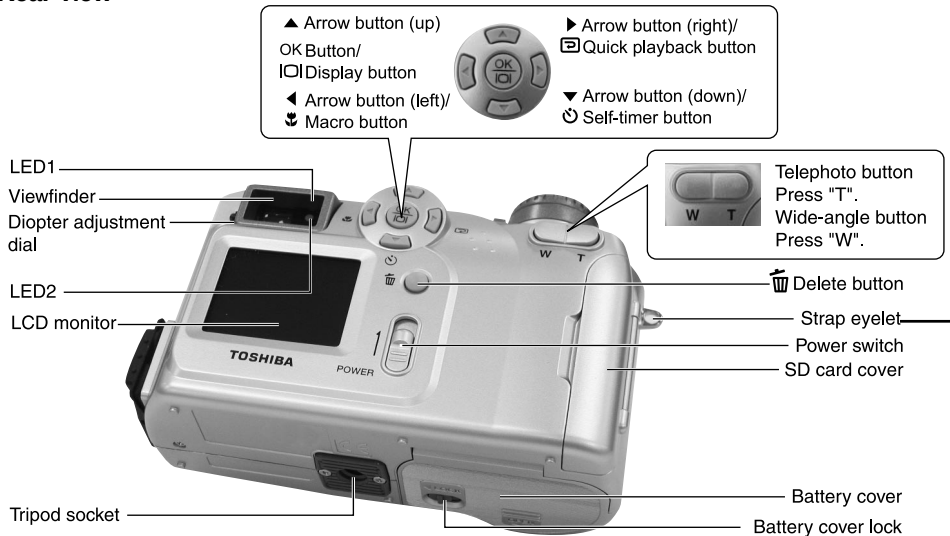
Recording & Viewing
Video Clips

Connecting to
the Computer

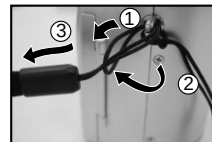
Other Useful
Information

Getting to Know the Camera (continued)

Rear View



Attach the lens strap and wrist strap as illustrated below.



Getting to Know the Camera (continued)

LED Indicators

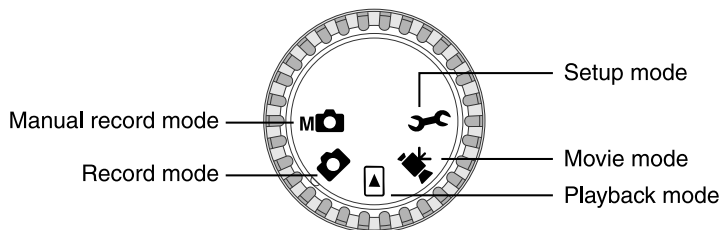
Indicator	Status	Description	Sound
LED1	Solid orange	The camera is powered on.	No
LED1	Blinking orange	When detecting the system error	Yes *(3)
LED1	Solid orange	Charging the flash	No
LED1	Blinking orange	Image is being recorded to the SD memory card.	No
LED1	Blinking orange	When transferring images to your computer	No
LED2	Solid green	The system is ready.	Yes *(1)
LED2	Solid green	is ready to record images or movie clips (after AF is locked)	Yes *(1)
LED 1	Blinking orange	Out of focus	No
LED 2	Solid green		
Self-timer indicator	Blinking red	self-timer function is activated	Yes *(1)

* (3) The camera sounds three beeps.

* (1) The camera sounds one beep.

Getting to Know the Camera (continued)

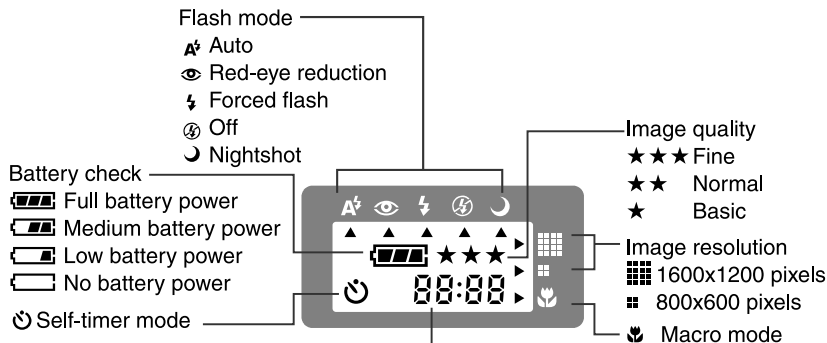
Mode Dial



Mode	Description
[M] Manual record mode	Use this mode to take still images by manually adjusting camera settings such as white balance, EV compensation and sharpness.
[] Record mode	Use this mode to take still images.
[] Playback mode	Use this mode to view or delete your images or video clips. Slide show for recorded images is also available in this mode.
[] Movie mode	Use this mode to record video clips.
[] Setup mode	You can choose your preferences on the camera's settings in this mode.

Getting to Know the Camera (continued)

Status LCD



Digital indicator

(This display varies according to the mode dial setting.)

Displays possible number of shots in Record mode

Manual record mode

Displays possible seconds to be recorded in Movie mode

Displays the current number of image in Playback mode

Displays "PC" when connect the camera to your computer via USB cable

Getting to Know the Camera (continued)

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

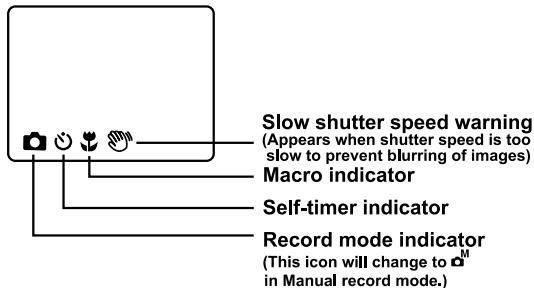
Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

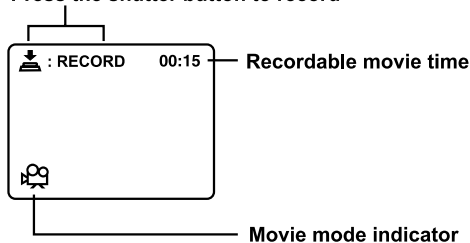
LCD Monitor Indicators

The displayed indicators when recording images:



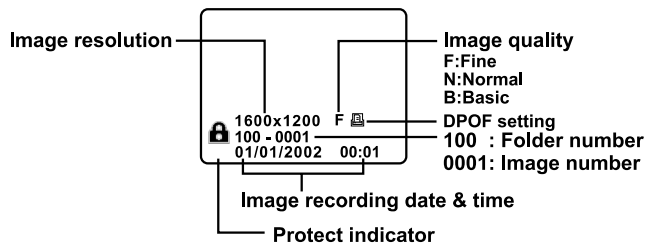
The displayed indicators when recording video clips:

Press the shutter button to record

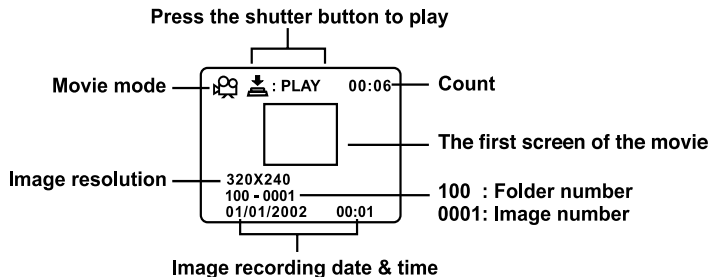


Getting to Know the Camera (continued)

The displayed indicators when playing still images back:



The displayed indicators when playing video clips back:



NOTE

- If no operation is performed for 90 seconds, the LCD Monitor will be automatically turned off.

Installing and Removing the Batteries

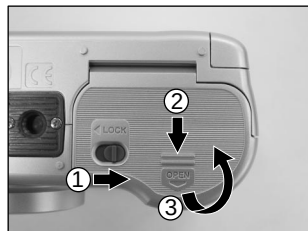
This camera uses four AA batteries. Acceptable batteries include alkaline, Ni-MH and lithium.

Loading the Batteries

IMPORTANT

- Before you load or remove the batteries, be sure to turn the camera off.
- The camera may not start normally if you load batteries with the power on. If this happens, turn the camera off, and then turn it on again.

1 Make sure the camera is off. Unlock and slide the battery cover in the direction of the OPEN arrow.

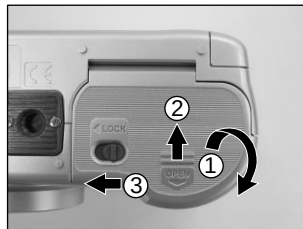


2 Insert the batteries according to the correct polarity marks (+ or -).



Installing and Removing the Batteries (continued)

- 3 Close and lock the battery cover firmly.



Removing the Batteries

To remove the batteries, open the battery cover, remove batteries and close the battery cover.

IMPORTANT

- Pay attention while removing the batteries to prevent the camera or batteries from dropping by accident.
- When the image is being recorded to the SD memory card or the internal memory, the LED 1 is blinking orange. Do not open the battery cover during this process.

Installing and Removing the Batteries (continued)

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Battery Status

The following battery status is displayed on the LCD monitor when the camera is turned on.

Icon	Status
	Sufficient amount left
	Fairly consumed
	Nearly exhausted
	Completely exhausted

IMPORTANT

- Before you load or remove the batteries, be sure to turn the camera off.
- The camera may not start normally if you load batteries with the camera powered on. If this happens, turn the camera off, and then turn it on again.
- When you remove the batteries from the camera for over 5 minutes, the date and time may return to the default setting. If this happens, set them again when using the camera.

Using the AC Power Adapter

- 1 Open the jack cover and connect one end of the AC power adapter to the DC IN jack on the camera.



- 2 Connect the other end to an electrical outlet.

IMPORTANT

- When the image is being recorded to the SD memory card or the internal memory, the LED 1 is blinking orange. Do not disconnect the AC power adapter from the camera during this process.

NOTE

- Make sure to use only the specified AC power adapter (5V/3A) for the camera. Otherwise, it may cause damages to the camera, which is not covered under the warranty.

Loading and Removing the SD Memory Card

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

The camera comes with 8MB of internal memory, allowing you to store images and video clips in the camera. However, you can expand the memory capacity by using an optional SD memory card so that you can store more images and video clips. The SD version working on PDR-2300 is 1.01.

Loading the SD Memory Card

- 1 Make sure the camera is off.**
- 2 Open the SD memory card cover. Insert a SD memory card with the contact connector facing forward.**
If the card cannot be inserted, check whether the direction is correct.
- 3 Close the SD memory card cover.**



Removing the SD Memory Card

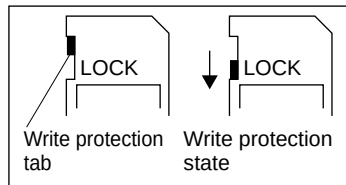
To remove the card, make sure the camera is off. Press the SD memory card once and remove the card.

IMPORTANT

- When the image is being recorded to the SD memory card or the internal memory, the LED 1 is blinking orange. Do not open the SD card cover during this process.

NOTE

- If you set the SD memory card in the LOCK position, you cannot record, edit or delete images stored on the SD memory card.
- You cannot use the internal memory while the camera with the SD memory card installed.



Turning the Power On/Off

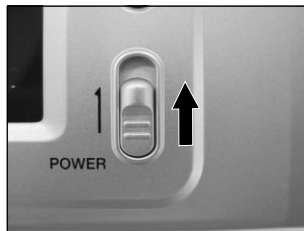
Turning the Power On

1 Slide the [POWER] switch to turn the camera on.

Remove the lens cap during photography.

In the [], [M ] or [] modes, the lens extends from the camera body.

When the camera is turned on, the Auto Power Off function starts to work.



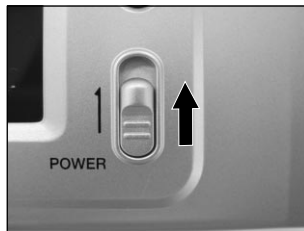
IMPORTANT

- If no operation is carried out for a certain period of time, the power is turned off to prevent battery wear. This is called "Auto Power Off".

Turning the Power Off

1 Slide the [POWER] switch to turn the camera off.

The power is turned off, and the lens returns to its original position in the body.



How to Hold Your Camera

When taking a picture, remember to hold the camera firmly and prevent your finger or straps from covering the lens or flash.

Right

Holding the camera by using both hands with your arms firmly held against the sides of your chest.



Wrong

Holding the camera with your fingers covered over the lens.



How to Press the Shutter Button

The shutter button can be pressed down in two stages: halfway down and fully down. When pressing the shutter button halfway down, the camera adjusts the exposure and focus. When pressing the shutter button fully down, the camera takes a picture.

1 Press the shutter button down halfway [①].

The camera adjusts the exposure and focus, and LED 1 lights orange. Take a picture until the LED 1 is off and LED 2 lights green.

2 And then press it the rest of the way down [②].

The camera takes a picture.

The LED1 blinks orange while the image is being saved to the memory.



IMPORTANT

- Never open the battery cover or remove the SD memory card while an image is being recorded. This may corrupt the data on the SD memory card or damage the SD memory card itself.

How to Press the Shutter Button (continued)

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

NOTE

- The image in the LCD monitor sometimes darkens while the shutter button is pressed down halfway until the image becomes focused.
- If the subject is not in the center of your desired image, you can point the subject and press the shutter button down halfway first. And then with the shutter button held halfway down (focus and exposure locked), reframe your picture and press the shutter button the rest of the way down to complete the shooting.
- Moving the camera while pressing the shutter button will cause the image blurred.
- The PDR-2300 uses an accurate auto-focus mechanism. However, it may have difficulty focusing or not be able to focus under the following situations.
 - When the subject is distant and dark
 - When there are objects in front of or behind the subject (such as an animal in a cage or a person in front of a tree)
 - Subjects with little reflection, such as hair or fur
 - Subjects with no solidity, such as smoke or flames
 - Subjects viewed through glass
 - Subjects moving at high speed
 - Very shiny subjects such as a mirror or car body
 - Extremely low contrast subjects
 - Subjects that have low contrast and merge into the background (such as white walls or subjects dressed in the same color as the background)
- If the image cannot be focused in dark places, the focus is automatically fixed to infinity. When the flash is used at this time, PDR-2300 will detect the distance to the subject by emitting the pre-flash and then focus at the subject.

Choosing the Language

When you first turn the camera on, the language setting screen appears, prompting you to choose a language for displayed information on the LCD monitor. Follow the steps below to set the language.

- 1 Select a language that you require by using the [▲ / ▼] button.**
The provided languages are [ENGLISH], [FRANÇAIS], [DEUTSCH], [ESPAÑOL], [日本語].

- 2 Press the [OK] button to confirm.**

NOTE

- The language setting will be saved even when the camera is turned off.

Setting the Date and Time

When you first turn the camera on, the language setting screen prompts. Once the language is set, the date and time setting screen follows to appear, allowing you to define. You can also skip this step by pressing the [OK] button repeatedly.

- 1** Enter the values of the [YEAR], [MONTH], [DAY] and [TIME] fields by using the [▲ / ▼ / ◀ / ▶] button. And then press the [OK] button.
- 2** Set the last field and press the [OK] button, the date and time setting screen will exit.

NOTE

- Each time you remove the batteries or AC power adapter from the camera, the date and time settings might restore to the default values. If this is happened, reset the date and time.

Setting the Image Resolution and Quality

The resolution and quality settings determine the size and compression ratio of your images and how many images can be stored in internal memory or on the SD memory card. The higher resolution and quality produce the large size and less compressed image but take up more space in memory.

Higher resolution and quality are recommended if you want to enlarge images. Lower resolution and quality take up less memory space, suitable for sharing images via e-mail or the Internet. To change the image resolution and quality, press the [] on the top of the camera repeatedly until the settings that you want appear on the status LCD.

Resolution & Quality: The camera provides 2 resolution modes and 3 quality modes, which can be changed cyclically by pressing the resolution & quality button. The cyclical order is [1600x1200] [] → [1600x1200] [] → [1600x1200] [] → [800x600] [] → [800x600] [] → [800x600] [] → repeat.

Resolution & Quality Indicators on the status LCD

In [] / [] mode: shows the resolution & quality settings of the image to be recorded

In [] mode: shows the resolution & quality settings of the recorded image

Setting the Image Resolution and Quality (continued)

The table below shows the approximate shots that you can take at each setting based on 8MB internal memory (7MB internal memory for storing image/video clip files) or a 8MB SD memory card.

Resolution	Quality	Compression Ratio	8 MB Internal Memory	8MB SD Memory Card
Full size: [] 1600x1200 pixels	[★★★] Fine	8:1	10	9
	[★★] Normal	12:1	15	14
	[★] Basic	16:1	20	18
Half size: [] 800x600 pixels	[★★★] Fine	8:1	41	37
	[★★] Normal	12:1	62	56
	[★] Basic	16:1	83	75

- The above data shows the standard testing results. The actual capacity varies according to the shooting conditions and settings.

NOTE

- You cannot use the internal memory while the camera with the SD memory card installed.

Taking Pictures

The camera is equipped with an optical viewfinder and a 1.6" LCD monitor to compose pictures. Taking pictures by using the viewfinder can conserve battery power. If the battery level is low and no extra batteries are handy, we recommend that you compose pictures by using the viewfinder. Using LCD monitor can accurately compose pictures and examine all details but consume more battery power.

The sensitivity value is automatically selected in the range of ISO100 to ISO400.

Using the Viewfinder

1 Turn the camera on by sliding the [POWER] switch.

2 Turn the mode dial to the [] mode or the [M ] mode.

3 Compose the picture in the viewfinder.
Turn the "diopter adjustment dial" until the image appears clearly within the viewfinder.

4 Press the shutter button down halfway (the camera adjusts the exposure and the focus), then press it the rest of the way down.

When the camera adjusts the exposure and focus, the LED 1 lights orange. Take a picture until the LED 1 is off and the LED 2 lights green. The LED1 blinks orange while the image is being saved to the memory.



Taking Pictures (continued)

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

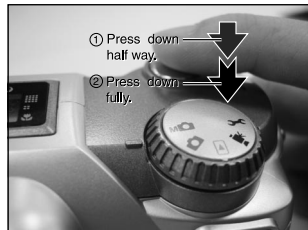
Connecting to
the Computer

Other Useful
Information

Using the LCD Monitor

- 1 Turn the camera on by sliding the [POWER] switch.
- 2 Turn the mode dial to the [] mode or the [M ] mode.
- 3 Turn the LCD monitor on by pressing the [] button and compose the picture with it.
- 4 Press the shutter button down halfway (the camera adjusts the exposure and the focus), then press it the rest of the way down.

When the camera adjusts the exposure and focus, the LED 1 lights orange. Take a picture until the LED 1 is off and the LED 2 lights green. The LED1 blinks orange while the image is being saved to the memory.



NOTE

- The image in the LCD monitor darkens when in strong sunlight or bright light. This is not a malfunction.
- Using the LCD monitor for an extended period of time may result in the decrease of shots that you can take. To increase the shots and conserve battery power, turn the LCD monitor off and use the viewfinder instead.
- If no operation is performed for 90 seconds, the LCD Monitor will be automatically turned off.

Reviewing the Last Picture in the Record Mode

The camera is equipped with the [] button, allowing the most recent image to be displayed on the LCD monitor in the []/[] mode. However, you can only view the last image with this function. To view all your recorded images, go to the [] mode.

If you intend to view the image just after taking a picture, you can press the [] button. The last image displays on the LCD monitor. To return to the record mode from the quick playback status and continue shooting, press the [] button again.



Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

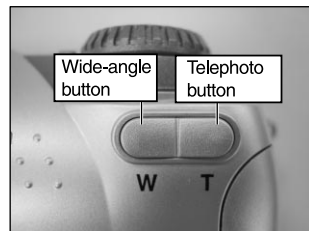
Connecting to
the Computer

Other Useful
Information

Using the Optical Zoom

The lens moves during the zoom photography. Zoom photography allows you to take telephoto and wide-angle shots. The subject appears closer by pressing the Telephoto button and appears farther away by pressing the Wide-angle button.

- 1 Turn the camera on.**
- 2 Turn the mode dial to the [] mode or the [M ] mode.**
- 3 Turn the LCD monitor on by pressing the [] button.**
- 4 Press the Telephoto button to enlarge the subject.**
- 5 Press the shutter button down halfway, then press it the rest of the way down.**



Using the Digital Zoom

By using the digital zoom function, images can be enlarged the center of the screen so that the subject appears closer. However, the more the image is enlarged, the grainier the image will become. The digital zoom function is only available when you set the LCD monitor and the digital zoom to on. To enable the digital zoom, refer to DIGITAL ZOOM in Record menu.

- 1 Turn the camera on.
- 2 Turn the mode dial to the [] mode or the [M ] mode.
- 3 Turn the LCD monitor on by pressing the [] button.
- 4 Press the Telephoto button as far as it can go.
- 5 Activate 2X digital zoom function by pressing the **Telephoto button again**.
The 2X icon appears on the LCD monitor.
To cancel digital zoom function, press the Wide-angle button.
- 6 Press the shutter button down halfway, then press it the rest of the way down.



NOTE

- You can only set the digital zoom at the resolution of 1600x1200 pixels; digital zoom is not available at the resolution of 800x600 pixels. When you play back the image recorded with digital zoom, the image size is 800x600 pixels.
- The maximum zoom magnification is 2X for recording and 4X for viewing an image.
- Turn on the LCD monitor while using the digital zoom function.

Using the Self-timer

The self-timer duration is 10 seconds (default) or 2 seconds. After the activation of the self-timer by pressing the shutter button, the self-timer LED starts blinking slowly for 7 seconds and then blinking faster for the rest of 3 seconds. With this design, you can get in the frame when taking group pictures.

- 1 Secure the camera to a tripod or place it on a stable surface.**
- 2 Turn the camera on.**
- 3 Set the mode dial to the [] mode or the [M ] mode.**
- 4 Press the [] button.**
The [] icon appears on the LCD monitor and status LCD.
- 5 Compose the picture.**
- 6 Press the shutter button down halfway, then press it the rest of the way down.**
The self-timer function is activated.
- 7 After the self-timer indicator blinks for 10 or 2 seconds, the camera takes a picture automatically.**



NOTE

- After one shot is taken, the self-timer mode is turned to off.

Using the Macro Mode

Use the macro mode to shoot a close-up of the subject, such as flowers or insects. The effective range is between 20cm and infinity.

- 1 Turn the camera on.
- 2 Turn the mode dial to the [] mode or the [M ] mode.
- 3 Press the [] button.
The [] icon appears on the LCD monitor and the arrow points to the macro icon on the status LCD.
- 4 Compose the picture.
- 5 Press the shutter button down halfway, then press it the rest of the way down.



NOTE

- When shooting a close-up of the subject, you can compose the picture by using the viewfinder or the LCD monitor. However, composing the picture by using the viewfinder in macro mode may cause images composed to be off-center due to the parallax phenomenon. We recommend that you use the LCD monitor instead to compose the picture in this situation.
- The camera remains in the macro setting even if one shot is taken. To cancel the macro setting, you have to press the [] button again.

Using the Flash

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

The flash is designed to function automatically in dark places. You can take a picture with the suitable flash setting according to the different conditions. If you change the flash setting, the camera will remain in that setting even when the camera is turned off.

- 1 Turn the camera on.
- 2 Turn the mode dial to the [] mode or the [M ] mode.
- 3 Press the [] button located on the top of the camera repeatedly until your desired flash mode appears.
- 4 Press the shutter button down halfway, then press it the rest of the way down.



IMPORTANT

- When taking pictures in too bright places or under the situation that the subject is too close, the pre-flash together with the main flash sometimes reach up to four times.
- When the white balance is set to the mode other than AUTO, the flash is automatically changed to OFF. At this time, you can still select the flash mode that you require if necessary by manually pressing the [] button.

Using the Flash (continued)

The camera provides 5 flash modes: Auto (default), Red-eye reduction, Forced flash, Off, Night Shot, which can be changed cyclically by pressing the flash button on the top of the camera. The table below tells you how to choose the appropriate flash mode while shooting.

Flash Mode	Description
[]Auto	The flash fires automatically according to the ambient conditions. Select this mode for general photography.
[]Red-eye Reduction	The flash emits a pre-flash before the main flash flashes, which causes the pupil in the human eye to close and eliminates red-eye phenomenon. Select this mode when taking pictures of people and animals in low-light conditions.
[]Forced Flash	The flash always fires regardless of the surrounding brightness. Select this mode for recording images in artificial light (backlighting, fluorescent lighting, etc.).
[]Off	The flash does not fire. Select this mode when taking pictures at a place where the flash photography is prohibited or under the situation that the distance to the subject is too far away for the flash to have any effect.
[]Night Shot	The flash fires and the shutter speed becomes slow in this mode so that the subject and background will be exposed correctly while taking a picture with dark background at night.

NOTE

- If you take a picture in the [] mode at a place with a dark background or in the [] mode at a dark place, the shutter speed slows down, and [] is displayed. (When the shutter is pressed halfway, the LED1 lights and [] is displayed on the LCD monitor.) We recommend that you use a tripod to prevent blurred image caused by shaking.

Taking Pictures Manually

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

You can take pictures by manually adjusting conditions such as white balance, EV compensation and sharpness. For white balance, EV compensation and sharpness information, refer to WHITE BALANCE, EV COMPENSATION and SHARPNESS in Manual Record menu.

To take pictures manually:

- 1** Turn the camera on.
- 2** Turn the mode dial to the [M📷] mode.
- 3** Press the [MENU] button.
- 4** Move to WHITE BALANCE, EV COMPENSATION or SHARPNESS by using the [▲ / ▼] button.
- 5** Change the settings by using the [◀ / ▶] button and then press the [OK] button.
- 6** Compose the picture.
- 7** Press the shutter button down halfway, then press it the rest of the way down.



Changing the System Settings (Rec Mode)

Record Menu

You can use the record menu/manual record menu to change LCD brightness, enable digital zoom, and determine the conditions such as white balance, EV compensation and sharpness. To do this, press the [MENU] button and then scroll through the options by using the [▲/▼] button.

LCD BRIGHTNESS

This option adjusts the brightness of the LCD monitor (-5 to +5). Press the [OK] button, the LCD brightness bar appears. Press the [▲/▶] button to brighten the LCD monitor while press the [▼/◀] button to darken the LCD monitor. And then press the [OK] button.

DIGITAL ZOOM

You can take digital zoom shots by activating the digital zoom function. Use the [◀] button to select [ON] if necessary. And then press the [OK] button.

Changing the System Settings (Rec Mode) (continued)

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

WHITE BALANCE (Manual mode only)

The image appears different under different color of lighting. Human eyes can solve this problem. But for camera, you need to make adjustments. Normally, the camera adjusts the white balance automatically. However, if the image appears in strange colors, we recommend that you change the white balance setting. Use the [◀ / ▶] button to select the appropriate white balance and then press the [OK] button.

[AUTO]: automatically adjusting the white balance

[SUN]: for recording outdoors on a bright day

[SHADE]: for recording under cloudy and shady sky

[FLUORESCENT 1]: for recording under bluish fluorescent lighting

[FLUORESCENT 2]: for recording under reddish fluorescent lighting

[TUNGSTEN]: for recording under tungsten lighting

NOTE

- When the white balance is set to the mode other than AUTO, the flash is automatically changed to OFF. At this time, you can still select the flash mode that you require if necessary by manually pressing the [⚡] button.

EV COMPENSATION (Manual mode only)

When the subject is too dark or too bright, the camera adjusts the brightness to make the subject becomes brighter or darker. This is called EV compensation. The EV compensation of the camera is ranged from -1.8EV to +1.8EV. Use the [◀ / ▶] button to select the EV compensation that you want and then press the [OK] button.

Effective Subjects and Set Values

- Positive (+) Compensation
 - Copying of printed text (black characters on white paper)
 - Backlight portraits
 - Very bright scenes (such as snowfields) and highly reflective subjects
 - Shots made up predominantly of sky

Changing the System Settings (Rec Mode) (continued)

- Negative (-) Compensation
 - Spotlight subjects, particularly against dark backgrounds
 - Copying of printed text (white characters on black paper)
 - Scenes with low reflectivity, such as shots of green or dark foliage

SHARPNESS (Manual mode only)

This option sets the level of image sharpness. Use the [◀ / ▶] button to select the sharpness mode that you want and then press the [OK] button.

[NORMAL] : Leave the image detail as captured.

[SOFT] : Soften the edge of the image detail for the special effects.

[HARD] : Sharpen the edge of the image detail.

SELFTIMER

This option allows you to set the self-timer delay with 10 seconds or 2 seconds. Use the [◀ / ▶] button to select the delay time and then press the [OK] button.

[10 SEC]: the shutter button will be released automatically after 10 seconds

[2 SEC]: the shutter button will be released automatically after 2 seconds

EXIT

This option exits the manual record/recond menu and then returns to the [M ] / [] mode. Press the [OK] button to exit. You can also press the [MENU] button again to exit.

Playing Back Images

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

In the [] mode, you can view, magnify, delete your images or play video clips back. This mode even provides thumbnail images display and slide show, allowing you to quickly search for the image that you want or play the images back one by one automatically.

1 Turn the camera on by sliding the [**POWER**] switch.

2 Turn the mode dial to the [] mode.

3 Select the image that you want to view by using the [ / ] button.

To view the previous image, press the [] button.

To view the next image, press the [] button.



NOTE

- If there is no image stored in the internal memory or on the memory card, "no images" message will appear on the LCD monitor.
- You can also view your images on the TV screen. First connect one end of the video cable to the video out jack of the camera. Then connect the other end to the video input socket of the TV. Turn the mode dial to the [] mode and then turn the TV and camera on.

Zooming Images in and out

This mode allows you to enlarge your image on the selected portion of the image with 4X magnification to check for small details.

- 1 Turn the mode dial to the [] mode with the camera powered on.**
- 2 Select the image that you want to view by using the [ / ] button.**
- 3 Enlarge the image by pressing the Telephoto button.**
Pressing the Telephoto button once magnifies the image to 2X. Pressing it again magnifies the image to 4X.
When enlarging the recorded image, you will see a red frame with a red box inside. The red frame indicates the entire image, while the red box shows the enlarged area.
- 4 To view the different portion of the enlarged image, press the [ /  /  / ] button.**
- 5 To return to the regular display from 4X-enlarged status, press the Wide-angle button twice.**

Current position of enlargement

Entire image



NOTE

- The zoom in function magnifies the image from 1X → 2X → 4X.
- The zoom out function reduces the image from 4X → 2X → 1X.

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Displaying Thumbnail Images

This function allows you to view 9 thumbnail images on the LCD monitor at the same time, which can quickly search for the image that you want.

1 Turn the mode dial to the [] mode with the camera powered on.

2 Press the [] button once.
The image information appears on the LCD monitor.

3 Press the [] button again.

Nine thumbnail images show on the LCD monitor if the image number reaches up to nine frames.

To view a full-size image, press the [OK] button after selecting it by using the [ /  /  / ] button.



NOTE

- By pressing the [] button repeatedly, the image will show as follows.
Image only → Image and OSD (on-screen display) → Thumbnail image display



Slideshow Display

Slideshow function enables you to play your images back in order automatically, which is very useful and convenient for checking recorded images and for presentations.

- 1 Turn the mode dial to the [] mode with the camera powered on.
- 2 Press the [MENU] button and move to SLIDE SHOW by using the [ / ] button.



- 3 Set the playback interval by using the [ / ] button and press the [OK] button.

The slideshow display starts. You can view the image displayed on the LCD monitor one by one with the interval that you set.

To stop the slideshow display, press the [OK /  /  / ] button.

NOTE

- You can adjust the slideshow display interval within the range of 2 sec. to 10 sec. For interval setting, refer to SLIDE SHOW in Playback menu.
- The auto power off does not function during slideshow display.

Protecting Images/Video Clips

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

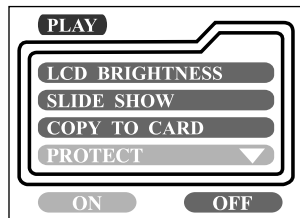
Connecting to
the Computer

Other Useful
Information

You can protect your desired images/video clips from being accidentally erased by using the protect function. To protect an image/video clip, follow the steps below:

Protecting an Image/Video Clip

- 1 Turn the mode dial to the [] mode with the camera powered on.**
The last image/video clip appears on the LCD monitor.
- 2 Select the image/video clip you want to protect by using the [ / ] button.**
- 3 Press the [MENU] button on top of the camera.**
The playback menu appears.
- 4 Move to the PROTECT option by using the [ / ] button. Use the [ / ] button to select [ON], and then press the [OK] button.**
Once the image is protected, the protection icon will display on the left bottom of the selected image.



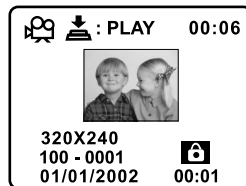
Protecting Images/Video Clips (continued)

For the video clip, the protection icon will display on the right bottom as illustrated.

To protect more images/video clips, repeat steps 2 to 4 in "Protecting an Image/Video Clip".

IMPORTANT

- The protected image/video clip cannot be erased except using FORMAT MEDIA function (refer to FORMAT MEDIA in Setup menu).



Removing the Protection

1 Carry out the steps 1 to 3 in "Protecting an Image/Video Clip".

2 Move to the PROTECT option by using the [▲ / ▼] button. Use the [◀ / ▶] button to select [OFF], and then press the [OK] button.

The protection icon displayed on the selected image/video clip is removed.

To remove the protection from more images/video clips, repeat this procedure described in "Removing the Protection".

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

DPOF Settings

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

DPOF is the abbreviation for Digital Print Order Format, which allows you to embed printing information on your memory card. You can select the pictures to be printed and how many prints to make by using the DPOF menu on the camera and insert the memory card to the card-compatible printer. When the printer starts printing, it will read the embedded information on the memory card and print the specified images.

To do the DPOF setting:

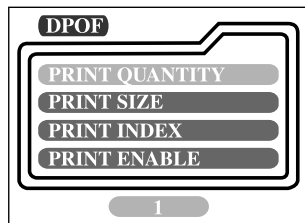
- 1 Turn the mode dial to the [] mode with the camera powered on.
- 2 Select the image you want to use the DPOF settings by using the [ / ] button.
- 3 Press the [MENU] button on the top of the camera.
- 4 Move to the DPOF option by using the [ / ] button.
- 5 Press the [OK] button to enter the DPOF sub-menu. Use the [ / ] button to set the values for each field and then press the [OK] button.

[PRINT QUANTITY] : you can select image quantity from 1~9

[PRINT SIZE] : you can select your preferred image size
(PRINT STD, 3x5, 4x6, 5x7, 8x10)

[PRINT INDEX] : allows you to print the images in index format
[PRINT ENABLE] : If you select ENABLE, the camera saves the DPOF settings.

If DISABLE is selected, all the settings will be erased.



DPOF Settings (continued)

(DPOF shortcut)

You can use the shutter button to quickly do the DPOF setting. Follow the steps below:

- 1** Turn the mode dial to the [] mode with the camera powered on.
- 2** Press the shutter button to toggle the DPOF print tag setting for the specified image.

NOTE

- When using the shutter button to enable the DPOF setting, the default setting is size=standard, and quantity=1.

IMPORTANT

- The PDR-2300 may take several minutes to process the DPOF-setting images. Please wait until this processing is complete.

Deleting Images

You can delete one image/video clip or all images/video clips at a time depending how long you press the [] button. To delete one image at a time:

- 1** Turn the mode dial to the [] mode with the camera powered on.
- 2** Select the image/video clip you want to delete by using the [ / ] button. Press the [] button.
- 3** Select [YES], and press the [OK] button. The next image/video clip appears.
If you want to cancel the deletion, select [NO].
- 4** Continue the deletion if necessary. If all images are deleted, [ NO IMAGES] pops up. To exit, turn the mode dial to other mode.



To delete all images at a time:

- 1** Press the [] button for over 1 second.
- 2** Select [YES] and press the [OK] button. The [ NO IMAGES] pops up. To exit, turn the mode dial to other mode. If you select [NO], the screen will return to the [] mode.

NOTE

- To delete the images or video clips stored in the internal memory, remember not to insert the SD memory card in the camera. Otherwise, you will delete the images or video clips stored in the SD memory card.

Changing the System Settings (Playback Mode)

Playback Menu

You can use the playback menu to automatically display your images one by one or configure DPOF setting, etc. To do this, press the [MENU] button and then move through the options that you want to configure by using the [▲/▼] button.

LCD BRIGHTNESS

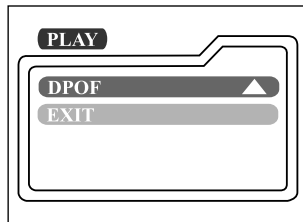
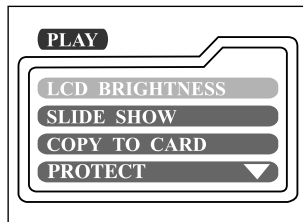
Refer to LCD BRIGHTNESS in Record menu.

SLIDE SHOW

This option can automatically display one image at a time in order with the delay time that you select. Use the [◀/▶] button to select the delay time that you want and then press the [OK] button.
[2 sec], [4 sec], [6 sec], [8 sec], [10 sec]

COPY TO CARD

This option allows you to copy your images from the camera's internal memory to a SD memory card. However, you can only do this with a SD memory card installed and internal memory contains images. Use the [◀/▶] button to select [YES] if necessary and then press the [OK] button.



Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Changing the System Settings (Playback Mode) (continued)

Getting Ready

PROTECT

Refer to page 62 for PROTECTING IMAGES.

Taking Pictures

DPOF

Refer to page 64 for DPOF SETTINGS.

Playing Back/
Erasing Images

EXIT

This option exits the playback menu and then returns to the [] mode. Press the [OK] button to exit. You can also press the [MENU] button again to exit.

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Recording Video Clips

The movie mode allows you to record video clips in Motion JPEG AVI format at the resolution of 320 x 240 pixels.

1 Turn the camera on by sliding the [POWER] switch.

2 Turn the mode dial to the [] mode.
The recordable movie time is displayed on the status LCD and the LCD monitor.

3 You can start recording a video clip by pressing the shutter button down fully.
The elapsed time is displayed on the LCD monitor while the recording starts.

To stop recording, press the shutter button again.



IMPORTANT

- When recording the video clip, the AVI file and THM file are automatically generated, which are necessary for playing the video clip back. Be careful not to delete these 2 files by mistake.
- When transferring the video clips to your computer, the AVI file and THM file will exist in the same folder.

NOTE

- The maximum recordable movie time is 15 seconds.
- The zoom function cannot be activated while playing the video clip back.
- In movie mode, resolution/quality, macro, self-timer, and digital room cannot be set or activated.
- In movie mode, the flash mode is automatically set to [OFF].

Getting Ready

Taking Pictures

Laying Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Reviewing Video Clips

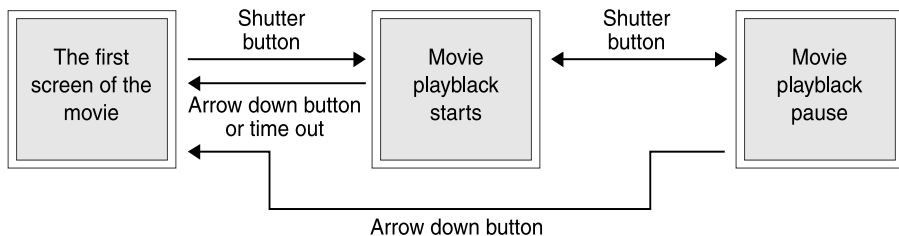
To view the recorded video clips, follow the steps below.

- 1 Turn the mode dial to the [] mode with the camera powered on.**
- 2 Select the video clip that you want to view by using the [ / ] button.**
- 3 Press the shutter button to start.**

To pause playback at any time, press the shutter button again.

To stop playback, press the [] button.

Pressing the shutter button or the [] button while playing back the video clip will change the status as follows:



About the Software Application

The supplied CD-ROM includes the following software applications, which allows you to import images (by installing the USB driver) and edit images (by using ACDSee™).

● ACDSee™ (Image Viewing Software)

This software allows you to view, process, or modify recorded images on your computer. For detailed information about this software, refer to its help file.

● DirectX (Video Playback Software)

Install this software when Windows Media Player cannot play back the recorded video clips.

● USB Driver (for Windows® 98 Only)

Install this driver when connecting this camera to the computer running Windows® 98. This driver is exclusively used for Windows® 98. Installing the USB driver on computers running Windows® 2000, Windows® ME or Windows® XP is not necessary. For computers running Mac OS 9.0 or higher, installing the USB driver is also unnecessary as the computer will automatically recognize the camera and load its own USB driver.

● Service & Support File

This file includes information on service and support. We recommend that you save this file in your computer in case you lose this manual.

IMPORTANT

Software and Instruction Manual

- Copying or duplication of the supplied software applications or Instruction Manual in part or in whole is not allowed without the prior permission of Toshiba Corporation.
- Use of the supplied software applications and Instruction Manual is allowed only on one personal computer.
- Toshiba Corporation is not liable whatsoever for any damages to the user or a third party as a result of use of a device with the supplied software applications and Instruction Manual.
- The personal computer screens shown in this Instruction Manual are examples and may differ from actual screens. Toshiba Corporation is not liable whatsoever for any compensation arising from errors in this Instruction Manual.

System Requirements

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

To install the supplied software, your computer must conform to the system requirements below.

	Windows PC	Macintosh
CPU	Pentium® processor or higher	PowerPC G3 processor 266 MHz or higher
OS	Windows® 98/2000/ME/XP pre-installed PC	Mac OS 9.0 or later (Mac OS 9.2 or later recommended)
		Mac OS X 10.1 or later (Mac OS X 10.1.3 or later recommended)
Memory	64 MB or more	
Free Space on Hard Disk	20 MB or more (The empty space should be large enough to save images.)	
Color Monitor	256 colors (800 x 600 dots min., 32,000 colors or more recommended)	
Required Devices	CD-ROM drive, USB port	

*Proper connections with not all PCs will be assured.

When using Mac OS 9.0 or 9.1, you need to install CarbonLib 1.3 or later.

You can download the program from the web site of Apple Computer, Inc.

Connecting to a Computer Running Windows

The computer must have Windows 98, Window 2000, Windows Me or Windows XP pre-installed.

Installing ACDSee™

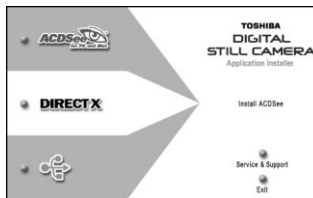
1 Insert the supplied CD-ROM into the CD-ROM drive.
The screen for selecting the displayed language appears.

2 Click [ ENGLISH].



3 Click [ **ACDSee** ].

Follow the on-screen instructions to complete the installation.
When the installation is complete, the ACDSee™ icon appears on the desktop.



Getting Ready

Taking Pictures

laying Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Connecting to a Computer Running Windows (continued)

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Installing the USB Driver

For Windows 98

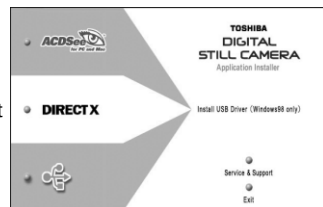
1 Insert the supplied CD-ROM into the CD-ROM drive.
The screen for selecting the displayed language appears.

2 Click [ ENGLISH].



3 Click [].

Follow the on-screen instructions to complete the installation.
Restart your computer after installing the USB driver.
Installing the USB driver for use in Windows 2000/Me/XP is not necessary. PDR-2300 conforms with USB Mass Storage Class.



Connecting to a Computer Running Windows(continued)

Connecting to the PC

- 1 Turn the computer and camera on.
- 2 Connect one end of the USB cable to the USB port on the computer, and the other end to the USB connector on this camera.
- 3 Follow the on-screen instructions to complete the installation.



IMPORTANT

- When transferring images to the camera, the LED 1 is blinking orange. Do not disconnect the USB cable/AC power adapter or open the battery cover/SD card cover during this process.

NOTE

- When the USB cable is connected, this camera is considered to be a removable disk.
- With the USB driver installed, the computer will recognize the camera while reconnecting the USB cable so that images can be transferred.
- Auto Power Off does not function while connecting this camera to the computer.

Getting Ready

Taking Pictures

Laying Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Connecting to a Macintosh Running Mac OS 9.0 or Later

Getting Ready

The Macintosh must have Mac OS 9.0 or later pre-installed.

Installing ACDSee™

Taking Pictures

- 1** Insert the supplied CD-ROM into the CD-ROM drive.
The screen for selecting the displayed language appears.

- 2** Click [ ENGLISH].



Playing Back/
Erasing Images

- 3** Click [ **ACDSee™** for PC and Mac].

Follow the on-screen instructions to complete the installation.
When the installation is complete, the ACDSee™ icon appears on the desktop.



Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Connecting to a Macintosh Running Mac OS 9.0 or Later (continued)

Connecting to the Macintosh

For Mac OS 9.0 or later users, the computer will recognize the camera and load its own USB driver while the USB cable is connected so that installing the USB driver is not necessary.

- 1 Turn the computer and camera on.**
- 2 Connect one end of the USB cable to the USB port on the computer, and the other end to the USB connector on this camera.**



NOTE

- When the USB cable is connected, this camera is considered to be a removable disk.
- With the USB driver installed, the computer will recognize the camera while reconnecting the USB cable so that images can be transferred.
- Auto Power Off does not function while connecting this camera to the computer.

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Disconnecting the Camera from the Computer

Getting Ready

For Computers Running Windows 98:

Turn the camera off, and then remove the USB cable from the computer and camera.

Taking Pictures

For Computers Running Windows 2000, Windows Me or Windows XP:

Double-click [] on the status bar located at the bottom right of the desktop. The Remove Hardware window appears. Select the USB disk removal, and then follow the on-screen instructions. After finishing the operations, remove the USB cable from the computer and camera.

Playing Back/
Erasing Images

For Macintosh Running Mac OS 9.0 or Later:

On the desktop, drag the folder (untitled) of this camera over the trash icon, and then remove the USB cable from the computer and camera.

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Using ACDSee™

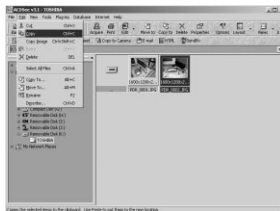
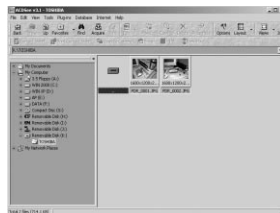
Installing ACDSee™ allows you to view a list of recorded images and transfer processed images from the computer to the camera.

Transferring Recorded Images to the Computer

- 1** Connect this camera to the computer by using the USB cable.

ACDSee™ is activated automatically and a list of images stored on the SD memory card is displayed.

- 2** Select the image that you want to copy, and then click “Copy” in the Edit menu.



Getting Ready

Taking Pictures

Laying Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Using ACDSee™ (continued)

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

3 Select a copy destination, and then click “Paste” in the Edit menu.

The image is transferred successfully and displayed in the selected destination.

IMPORTANT

It is recommended that you use the AC power adapter as a power supply for the camera while transferring images from the camera to your computer to prevent recorded images from being damaged.



If ACDSee™ is not activated while connecting the camera to your computer via the USB cable:

For Computers Running Windows:

Double-click the ACDSee™ icon on the desktop.

For Macintosh Computers:

Open the ACDSee™ folder on the hard disk, and then double-click the ACDSee™ icon.

Using ACDSee™ (continued)

Copying Processed Images to the Camera

You can process recorded images on the computer, make copies of them and send them back to the camera.

- 1 Connect this camera to the computer by using the USB cable.**

ACDSee™ is automatically activated.

- 2 Select the image that you want to copy, and then select “Copy to Camera” in the Plug-ins menu.**

When using a Macintosh, drag the image that you want to copy onto [X]. When a confirmation message appears, select “Yes.”



Getting Ready

Taking Pictures

Laying Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Using ACDSee™ (continued)

3

Select a post-conversion image size, and then click “OK.”

The image is named “ACDXXX.jpg” and is copied to the XXXACDSE folder on the SD memory card in the camera.



When copies are made, image size will be converted to 640x480 pixels.

Image is copied with the original size.

Resultant image size differs depending on the

original size of copied image.

1024x768 or larger

: The image will be converted to 1024x768 pixels.

640x480 to 1024x768

: The image will be converted to 640x480 pixels.

640x480 or smaller

: The image size will remain unchanged. For an image smaller than the screen, a black frame will surround it.

NOTE

- This camera may not display images properly while selecting “no size change”.
- Images copied from a Macintosh to this camera cannot be thumbnail displayed no matter which size is selected. This is not a malfunction on camera design.
- For details of ACDSee™, refer to its Help.

Installing DirectX

For Windows Only

1 Insert the supplied CD-ROM into the CD-ROM drive.
The screen for selecting the displayed language appears.

2 Click [**ENGLISH**].

3 Click [**DIRECTX**].
Follow the on-screen instructions to complete the installation.



Getting Ready

Taking Pictures

Laying Back/
Erasing Images

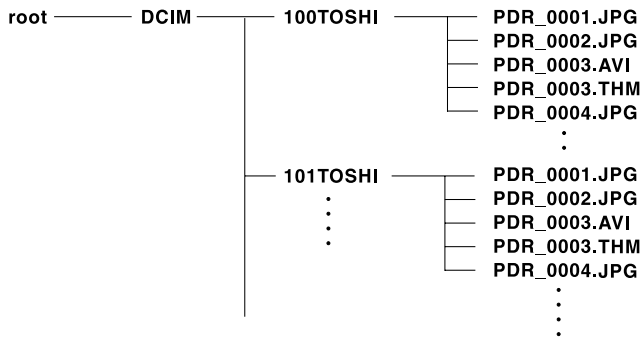
Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

File Structure

The images taken on the Toshiba PDR-2300 Digital Still Camera are stored in the SD memory card as shown below.



About Still Image Data

On the PDR-2300, still image data is saved in Exif format. This format is a JPEG data, which contains a thumbnail image and photographic settings.

Still image data is saved as follows:

Folder name : XXXTOSHI (XXX is any number within the range 100 to 999)

File name : PDR_XXXX.jpg (XXXX is any number within the range 0001 to 9999)

About Movie Data

Movie data is saved in the following format:

File format : AVI

Movie size : 320x240

Movie code : Motion JPEG

File name : PDR_XXXX.avi (XXXX is any number within the range 0001 to 9999)

: PDR_XXXX.thm (XXXX is any number within the range 0001 to 9999)

Changing the System Settings (Setup Mode)

You can select your preferences on the camera in the [] mode. Switch the mode dial to the [] mode and move to the option you want to configure by using the [ / ] button.

DATE/TIME

Refer to page 42 for SETTING THE DATE AND TIME.

LANGUAGE

Refer to page 41 for CHOOSING THE LANGUAGE.

SOUND

Camera sounds beep each time you press the camera button if this function is enabled. Select [ON] or [OFF] by using the [ / ] button and then press the [OK] button.

FORMAT MEDIA

This function formats the internal memory or the SD memory card and erases all images stored on either of them. If you select [YES] with the [ / ] button and press the [OK] button, the FORMAT MEDIA message appears on the LCD monitor. When you select [YES] and press the [OK] button again, a progress bar displays, showing the progress of the formatting.

NOTE

The MEDIA indicates the SD memory card while the camera with the SD memory card installed.
If not, the MEDIA indicates the internal memory.

VIDEO MODE

This option allows you to view your images on a TV. Connect the camera to your TV via the video cable connection first. Then select the video output format by using the [ / ] button and press the [OK] button.

Changing the System Settings (Setup Mode) (continued)

- [NTSC] : select this format when located in the U.S.A., Canada, Japan, Korea, Taiwan, Central America, Mexico, etc.
- [PAL] : select this format when located in Australia, Austria, Belgium, China, Denmark, Finland, Germany, Great Britain, Holland, Italy, Kuwait, Malaysia, New Zealand, Singapore, Spain, Sweden, Switzerland, Thailand, Norway, etc.

VERSION INFO.

This option displays the firmware version. "Firmware" refers to the software that controls the camera's operation. The firmware is pre-installed in the camera.

AUTO POWER OFF

In case no operation is carried out for a certain period of time while powered on, the camera stays idle or turns off automatically to conserve power after the inactivity period as mentioned below.

Inactivity Period	Camera Status
90 seconds	stay idle
3 minutes (default)	shut off

To activate the camera again while stayed idle, press any button or switch the mode dial. If the camera is shut off automatically, you need to turn the camera on again by sliding the [POWER] switch. The table above shows the default settings of auto power off. You can change the setting by using the [◀ / ▶] button and then press the [OK] button.
[3 min], [5 min], [10 min], [30 min]

NOTE

The camera will remain the auto power off setting even if it is turned off.

Changing the System Settings (Setup Mode) (continued)

RESET TO DEFAULT

If you want to restore all settings to their original status, select [YES] by using the [◀ / ▶] button if necessary and then press the [OK] button.

The following table shows the default setting for each item.

Item	Description
Image Resolution	1600x1200 pixels
Image Quality	[★★★] Fine
Flash	Auto
LCD Brightness	0
White Balance	Auto
EV Compensation	0.0
Slide Show Delay	4 seconds
Auto Power Off	3 minutes
Sound	On
Digital Zoom	Off

Getting Ready

Taking Pictures

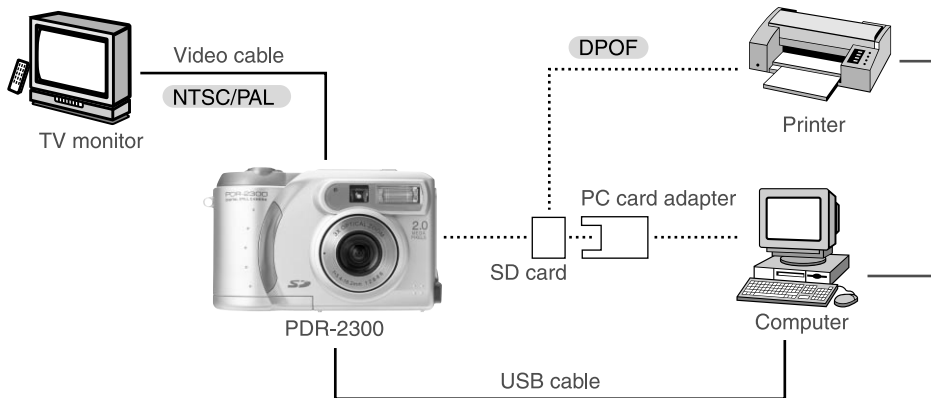
Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Connecting the Camera to Other Devices



Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Camera Specifications

Item	Description						
Sensor	Approx. 2.14 megapixels (effective pixels: approx. 2.06 megapixels), 1/2.7" CCD						
Resolution	1600x1200 pixels; 800x600 pixels						
LCD	1.6" color TFT LCD						
Self-timer	2/10 seconds delay						
Shutter speed	1/3~1/1000 second						
Zoom	3 x optical zoom, 2 x digital zoom						
Capture modes	Still photographs or video recording						
Memory type	8 MB internal memory (7MB internal memory for storing image/video clip files); SD memory card (optional) (up to 256MB capacity)						
Estimated shots to be taken <Still image mode>	SD memory card	1600x1200 pixels			800x600 pixels		
		[★★★] Fine	[★★] Normal	[★] Basic	[★★★] Fine	[★★] Normal	[★] Basic
	8MB	9	14	18	37	56	75
	16MB	20	30	41	82	123	164
	32MB	43	64	86	172	258	344
	64MB	88	132	176	352	529	705
	128MB	178	267	356	712	1069	1425
	256MB	355	532	710	1420	2130	2840
Recordable movie time <Movie image mode>	Fixed recordable movie time—15 seconds Resolution—320x240 pixels						

- The above data shows the standard testing results. The actual capacity varies according to the shooting conditions and settings.

Getting Ready

Taking Pictures

Laying Back/
Erasing ImagesRecording & Viewing
Video ClipsConnecting to
the ComputerOther Useful
Information

Camera Specifications (continued)

Getting Ready

Taking Pictures

Playing Back/ Erasing Images

Recording & Viewing
Video Clips

Connecting to the Computer

Other Useful Information

Item	Description
Flash settings	Auto, Red-eye Reduction, Forced Flash, Off, Night Shot
Flash effective range	0.5m ~ 2.5m
Lens	Auto focus zoom lens -f :5.4 ~ 16.2mm (equivalent to 36mm ~ 108mm on a 35mm camera) -Focal range :Standard-50cm ~ infinity Macro-approx. 50cm ~ infinity at telephoto -approx. 20cm ~ infinity at wide angle -Aperture ratio: F2.8/F5.6 (W), F4.4/F8.6 (T)
Exposure compensation	Auto; Manual: -1.8 ~ +1.8EV (0.3EV step)
White balance	Auto; Manual: Sun, Shade, Fluorescent 1, Fluorescent 2, Tungsten
Compressed format	JPEG, Motion JPEG AVI for video clip
Standards	JPEG, EXIF 2.1, DPOF, DCF 1.0, Motion JPEG AVI
Language supported	English, French, German, Spanish, Japanese
Interface	DC IN jack, USB connector, VIDEO OUT jack (NTSC or PAL)
Operating environment	Operation: 5°C~40°C, 30~80% humidity; Storage: -20°C~60°C, 10~70% humidity
Power	AA x 4 (Alkaline, Ni-MH or Lithium); AC power adapter
Tripod socket	Yes
Dimensions	110 x 51x 68 mm (W x D x H)
Weight	About 230g (without batteries and the SD memory card)

*Design and specifications are subject to change without notice.

Messages Displayed on the LCD Monitor

The following warning messages are displayed on the LCD monitor.

Message	Meaning
[]	Fairly consumed
[]	Nearly exhausted
[]	Completely exhausted
MEDIA FULL	No space left in the SD memory card. You cannot take photographs.
WRITE PROTECT	The SD memory card is locked. You cannot take photographs.
NO IMAGES	No image stored in the SD memory card.
PROTECT	You attempted to erase a protected image.

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Troubleshooting

When the camera does not operate properly, check the following items and find the solution for each problem.

Problem	Cause	Solution
The power cannot be turned on.	The batteries are running out.	Replace with new batteries.
	The AC power adapter plug is disconnected from an electrical outlet.	Plug the AC power adapter into an electrical outlet.
	The batteries are loaded in incorrect orientation.	Load the batteries in correct orientation.
The camera is powered off during operation.	The batteries are running out.	Replace with new batteries.
	Auto power off is functioning.	Turn the camera on again.
The batteries run out quickly.	You are using the camera in extremely cold conditions.	Put the batteries in your pocket or another warm place, and then load them into the camera just before taking a photograph.
	The battery terminals are dirty.	Wipe the battery terminals with a clean, dry cloth.
	The batteries have reached the effective life.	Replace with new batteries.

Troubleshooting (continued)

Problem	Cause	Solution
No photograph is taken when the shutter button is released.	Internal memory full or the SD memory card full.	Erase some images in either of them to increase space for photographing.
	No enough space in the SD memory card.	Insert a new SD memory card. Erase saved images to increase the empty space.
	The SD memory card is write-protected.	Cancel the write-protection. Replace with a new SD memory card.
	The SD memory card is not formatted.	Format the SD memory card.
	The SD memory card is damaged.	Insert a new SD memory card.
	Auto Power Off is functioning.	Turn the camera on again.
The flash cannot be used.	You selected flash Off mode.	Select another flash mode.
	You pressed the shutter button while the flash was charging.	Take a photograph until flash charging is complete.
The played-back image is too dark even though the flash fired.	The subject is too far away.	Move closer to the subject.
The played-back image is blurred.	The lens is not clean.	Clean the lens.
	You didn't hold your camera firmly while taking photographs.	Place the camera on a stable surface or use a tripod to take photographs.
A single image cannot be erased.	The SD memory card is write-protected.	Cancel the write-protection.
	The image is protected.	Cancel the image protection.
The date and time settings are cleared.	The camera is left for a long period of time without batteries.	Set the date and time again.

Getting Ready

Taking Pictures

Laying Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Glossary

Getting Ready

● AF/AE

AF (auto-focus).....A function for automatically focusing your camera.

AE (auto-exposure).....A function for automatically setting your camera's exposure.

AF/AE lock.....Locking of the focus and exposure settings.

Taking Pictures

● DPOF (Digital Print Order Format)

A standard for directly writing print information to the SD Memory Card. Files in this format can be printed easily by printers or photo print service bureaus that support this format.

Playing Back/
Erasing Images

● DCF (Design Rule for Camera File System)

A file system standard defined by the JEIDA (Japan Electronic Industry Development Association) that is required for exchanging data between digital still cameras or a digital camera and a printer. This standard defines the hierarchy and file names used when storing image files on memory cards or other recording medium.

Recording & Viewing
Video Clips

● Exif File Format (Exchangeable Image File Format)

A color still image format for digital still cameras, which is approved by the JEITA (Japan Electronics and Information Technology Industries Association). JPEG-compliant, this format is compatible with TIFF and JPEG and can be used in image processing software for most personal computers.

Connecting to
the Computer

● JPEG

A file format used for compressing and saving color images. The compression ratio can be selected, but the higher the compression ratio, the worse image quality becomes. This format is widely used in the paint software for PCs and on the Internet.

Other Useful
Information

Glossary (continued)

● NTSC (National Television System Committee)

Method of television transmission, used in Japan and North America.

● PAL (Phase Alternate Line)

Method of television transmission, used in the United Kingdom, Germany and other western European Countries.

● Red-Eye Effect

The phenomenon that people's eyes sometimes appear red in the picture when you use a flash to take a picture of them in low-light conditions. This is caused by the light of the flash reflecting off the inside of the eye.

● White Balance

When the brightness of the light changes, the human eye adapts so that a white object still looks white. On the other hand, devices such as digital still cameras see a white subject as white by first adjusting the balance to suit the color of the ambient light around the subject. This adjustment process is called white balance.

● SD Memory Card

The Secure Digital (SD) Memory Card is a flash memory storage device designed by the consortium of Matsushita Electronic (Panasonic), SanDisk and Toshiba to meet the security, capacity, performance and environmental requirements inherent in emerging audio and video consumer electronics devices. This recording medium can be used over and over again.

Glossary (continued)

Getting Ready

● **Formatting**

Transforming the contents of the SD Memory Card to a recordable state. (This is sometimes called "initialization".)

Taking Pictures

● **Exposure Compensation**

When the screen contains an extremely bright or dark object, the camera automatically adjusts the brightness, resulting in the subject being reproduced darker or lighter. Exposure compensation adjusts for this.

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Global Contacts

Country/Region	Company Name	Phone Number	E-mail	Website
Canada	Toshiba America Information Systems, Inc.	(800) 829-8318	dsc.support@tais.toshiba.com	www.toshiba.com/taisisd
China Hong Kong	Toshiba Hong Kong Ltd.	2956-0222	NA	www.toshiba.com.hk
France	Toshiba Systems (France)	08 92 35 01 92	consommateur@toshiba-tsfc.com	www.toshiba.fr/produits/video/index.htm
Germany	Toshiba Europe GmbH	(02131) 158 01	consumer@toshiba-teg.com	www.toshiba.de/comsumer
Italy	Toshiba Europe GmbH Sede Secondaria in Italia	(039) 6099342	toshiba.italia@toshiba-tuk.com	www.toshiba.it/
Mexico	Toshiba de Mexico, S.A. de C.V.	(800) 712-6764	NA	www.toshiba.com.mx
Singapore	Toshiba Singapore Pte.	270-7776	NA	www.cp.toshiba.com.sg
Switzerland	Toshiba Europe GmbH Swiss Sales Branch	01-9085656	info@toshiba.ch	www.toshiba.ch/
United Kingdom	Toshiba Information Systems (U.K.) Ltd.	(01932) 828828	enquiries@toshiba-tuk.com	www.toshiba.co.uk
United States	Toshiba America Information Systems, Inc.	(800) 829-8318	dsc.support@tais.toshiba.com	www.toshiba.com/taisisd

In the supplied CD-ROM, a file containing information regarding service and support is recorded; we recommend that you save this file to your computer in case you lose the instruction manual.

Getting Ready

Taking Pictures

laying Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information

Global Contacts (continued)

For Customers in the United States and Canada

Register your product On-Line.

To be a member of the Toshiba Digital Camera community, you can enjoy many advantages. Toshiba provides free firmware upgrades for applicable models, allowing you to get the latest technology and enhancement for your camera from the web site. There are links, updates and notices for special options at the Toshiba Digital Community, such as special adapter mounts for Tele-photo, Wide-angle, and other filters and lenses designed specifically for your digital camera. There are frequent discounts and promotions on printing services, carrying cases, service plans, and digital camera accessories. To find out more, visit the Toshiba Digital Community at www.toshiba.com/taisisd

Inquiries about the Supplied ACDSee™ Software

ACD Systems Online Support:

<http://www.acdsystems.com/English/Support/index.htm>

Getting Ready

Taking Pictures

Playing Back/
Erasing Images

Recording & Viewing
Video Clips

Connecting to
the Computer

Other Useful
Information